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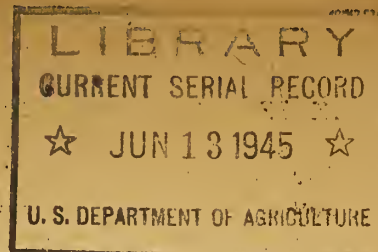
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TIMELY FARM TOPICS 28-a

(Farm Science Serves the Nation No. 12)



NEW MEMBERS OF THE GARDEN FAMILY

Recorded by Ernest Moore and M. L. DuMars, Office of Information, U. S. Department of Agriculture, March 27, 1945. Time, without announcer's parts, seven minutes and eleven seconds.

ANNOUNCER: (LIVE) And now by transcription...from the United States Department of Agriculture...we'll meet some new and welcome members of the garden family, developed by plant breeders of the Department in cooperation with State Experiment Stations. Beans, tomatoes, sweetcorn -- and a new summer leaf lettuce that I'd certainly like to try! But listen to Ernie Moore and Duke DuMars -- in a report on new varieties of vegetables.

TRANSCRIPTION

DUKE DUMARS: Well Ernie, where do we begin?

ERNIE MOORE: Where would you like to begin?

DUMARS: I'd like to begin with the Number One vegetable in the home garden -- the good old tomato!

MOORE: All right -- I'll tell you how plant breeders took a little runty tomato plant from the Andes Mountains, and developed that fine new variety called Pan America.

DUMARS: Why that's one of my favorites!

MOORE: Fine! And how'd you like some nice tender lettuce with your tomatoes?

DUMARS: Certainly. How could you have sliced tomatoes without "a bed of lettuce."

MOORE: Guess that's what the cookbooks say. I'm going to tell you about a new lettuce -- a variety that keeps right on producing nice green leaves at least three weeks after the older kinds have shot up and gone to seed.

DUMARS: What a boon to the gardener!

MOORE: It certainly is. And there's a new snapbean you ought to know about, and then--- Well, I think we'll wind up with that epicure's delight -- Golden Cross Bantam sweetcorn.

DUMARS: Okay! Let's get going!

MOORE: So now, back to the good old tomato. By the way, do you know that just a little over a hundred years ago -- people in the United States wouldn't dare to eat tomatoes?

DUMARS: For some reason or other, they thought tomatoes were poison.

MOORE: Then somebody -- evidently a fellow with lots of courage -- actually tasted one, found out it didn't hurt him at all, and after that people made up for lost time. The first work on tomatoes was done by private breeders, and they developed some handsome fruit. Big...smooth...deep red. But the trouble was, those beautiful tomatoes just wouldn't stand up -- under the various wilts and blights and so on that tomatoes have to suffer.

DUMARS: They weren't -- wilt-resistant?

MOORE: Not in the early days. But by 1915, plant breeders in the Department of Agriculture -- and at some of the State Experiment Stations -- set out to develop tomatoes resistant to disease. And one of these was our old friend "Marglobe."

DUMARS: Another one of my favorites. It's really wonderful!

MOORE: I doubt whether you realize just how wonderful it is.

DUMARS: What do you mean?

MOORE: Marglobe was introduced just in time to save the tomato industry, in the Southeast, from being wiped out by wilt and rust.

DUMARS: I didn't know that. How old is Marglobe, anyway.

MOORE: It's twenty years old -- but still one of the best. Even on the other side of the world -- in Australia -- you'll find they list Marglobe as one of their finest varieties.

DUMARS: Wonder what they say about Pan America?

MOORE: Well, it's so new -- I don't suppose they have it yet. You say Pan America's one of your favorites?

DUMARS: Yes, and it's practically immune to wilt.

MOORE: Do you know why it's "practically immune" to wilt?

DUMARS: I suppose -- because it has the right kind of parents.

MOORE: You might put it that way.

DUMARS: But I can't see how that little runty tomato from the Andes Mountains -- could have been worth much.

MOORE: My friend, that little runty tomato, from the Andes Mountains of Peru -- was immune to wilt.

DUMARS: Then I guess it was worth something -- to the plant breeders.

MOORE: I should say it was! You see, Duke -- even though they'd developed tomatoes definitely resistant to wilt, they still weren't satisfied. They had an idea -- if they just kept going -- they'd get a tomato practically immune to wilt.

DUMARS: But how did they know -- the Peruvian tomato was immune?



MOORE: They tested it. They took small plants -- of the wild tomato -- and dipped the roots into a pure mass of the live organisms that cause fusarium wilt.

DUMARS: Pretty rough treatment.

MOORE: It surely was. And then they set these plants out in warm soil, so the disease could do its worst. But no matter how hard they tried, they just couldn't hurt that Peruvian tomato the least bit -- with fusarium wilt. So then they knew they had just what they'd been looking for -- disease resistance of a very unusual degree.

DUMARS: But you said it was a little runty tomato.

MOORE: It was. The fruit was even smaller than a cherry. So they crossed the wild plant with Marglobe -- hoping to get the fine eating qualities of Marglobe plus the disease resistance of the wild tomato. Well, the first generation was resistant -- but the fruit was very small.

DUMARS: So they crossed it again?

MOORE: That's it. They crossed it back again with Marglobe, to increase the size -- and the next cross was larger, but still not large enough. So they crossed it back a second time -- and even a third -- before they got what they wanted.

DUMARS: Did they keep on testing all this time for that wilt disease?

MOORE: Yes indeed! Each time, they'd grow the plants in soil thoroughly infected with fusarium wilt -- always selecting the plants with the best fruit.

DUMARS: A job like that must take an awful lot of patience.

MOORE: It certainly does. In all, they grew over 80,000 tomato plants. And out of all these, they selected the one plant that was the best.

DUMARS: One out of 80,000.

MOORE: That's right. The seed of this plant was increased -- and introduced as that fine new variety, Pan America.

DUMARS: Now where's that new leaf lettuce to go with the tomatoes? What's the name?

MOORE: The name is "Slobolt." As you can figure out from the name, this lettuce doesn't bolt, or go to seed, as quickly as some of the older types. "Slobolt" is strictly a leaf lettuce. It's light green in color, and something like "Grand Rapids" -- except that it stands about three weeks longer in midsummer weather.

DUMARS: Must be just what I've been waiting for.

MOORE: But you'll have to wait a little longer, Duke. This variety is so new -- you won't be able to get any seed until 1946.

DUMARS: I'll put it down for next year's garden.

MOORE: Good. Something new to try next year. And now -- what kind of snapbeans do you grow in your garden?

DUMARS: Why one kind I grow is U. S. No. 5 Refugee -- developed by the United States Department of Agriculture.

MOORE: That's right. It's a very hardy bean, disease resistant, and stands a lot of heat -- which makes it a good variety for home gardens in the South. Another good home and market bean for the South is the new "Logan." Ever hear of that one?

DUMARS: Wasn't it developed in South Carolina, Charleston -- at the Vegetable Breeding Laboratory?

MOORE: Yes. It's a cross between U. S. No. 5 Refugee and Stringless Black Valentine -- and better than either one of its parents.

DUMARS: Better in what way?

MOORE: For one thing, "Logan" will set pods and produce in hot weather. Now for the West -- for people who live where curlytop disease is a problem -- they've got a new snapbean called "Pioneer." The first and only snapbean resistant to curlytop -- and recommended only for curlytop country.

DUMARS: You know what amazes me about these plant breeders? They just make up their minds what they want to develop, and then they just go ahead and develop it. If they want a snapbean for a certain region -- why, presto! There it is!

MOORE: Yes, but not presto! Don't get the idea that plant breeding doesn't take years and years of painstaking work. And finally, we come to --

DUMARS: Those roasting ears.

MOORE: Hybrid sweetcorn.

DUMARS: Golden Cross Bantam. But that's not so new, is it?

MOORE: Well maybe not so new, but it's the most important thing in sweetcorn in the whole country. Golden Cross Bantam is the result of several years of breeding to overcome one of the worst diseases of sweetcorn that we ever had to worry about -- especially in early varieties.

DUMARS: But that isn't its only claim to fame.

MOORE: Oh no. Many of the new hybrid varieties have two things the old varieties don't have. One is resistance to bacterial wilt disease -- and the other is hybrid vigor, which means you get a greatly increased yield. In many places, hybrid sweetcorns are taking the place of the older varieties. And of course most all the corn used for canning -- more than 90 percent of it -- is a hybrid of some kind or another.

DUMARS: And now they've got hybrids of other vegetables too.

MOORE: Yes, in fact we could go on and on, talking about the work of the plant breeders -- and how they're giving us better vegetables all the time.

DUMARS: How about a toast to the plant breeders. In tomato juice!

MOORE: Pan America?

DUMARS: Sure!

MOORE: Here's to their health! And may they never be satisfied!

DUMARS: Why that's no way --

MOORE: Don't worry. No plant breeder ever is satisfied. They're forever planning to solve more problems, and correct old troubles. Always dreaming up new varieties -- better than the last -- and then getting down to earth to make their dreams come true.

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ANNOUNCER: (LIVE) You've heard Ernie Moore and Duke DuMars, of the United States Department of Agriculture, in one of a series of reports on -- "Farm Science Serves the Nation."

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